

In the Claims:

Following is a listing of all pending claims. Marked up versions of all revised claims, showing insertions and deletions, are included in Appendix B.

1. A lamphead for use in semiconductor processing, comprising:
a monolithic member; and
a plurality of lamp receptacles and reflector cavities formed in the monolithic member, each lamp receptacle adapted to support a lamp and each reflector cavity shaped to act as a reflector for the lamp.
2. The lamphead of claim 1, further comprising:
a plurality of coolant passages formed in the monolithic member.
3. The lamphead of claim 1, wherein the monolithic member comprises at least one of copper and aluminum.
4. The lamphead of claim 1, further comprising:
a reflective coating upon a surface of each reflector cavity.
5. The lamphead of claim 4, wherein the reflective coating comprises at least one of gold and a dielectric stack on a gold layer.
6. (amended) The lamphead of claim 1, further comprising:
a plurality of lead passages formed in the monolithic member, each lead passage extending between one of the plurality of the lamp receptacles and one of the plurality of the reflector cavities, and adapted to receive a portion of a lamp.
7. (twice amended) The lamphead of claim 1, further comprising:
at least one lampholder having receptacles for outer leads of a lamp;
a ferrofluid; and

one or more magnets disposed about the lampholder and maintaining position of the ferrofluid near the receptacles;

such that when outer leads of a lamp are inserted into the lampholder receptacles, the ferrofluid surrounds the outer leads thereby suppressing arcing between the outer leads.

8. (amended) The lampholder of claim 7, wherein:
the outer leads of the lamp are magnetic, such that the magnets maintain position of the lamp.

9. A semiconductor processing system, comprising:
a process chamber having a support on which a substrate may be positioned during processing; and

a monolithic lampholder having a plurality of lamp receptacles and reflector cavities formed therein, each lamp receptacle adapted to support a lamp and each reflector cavity shaped such that the lamps direct radiant energy onto a substrate on the support.

10. (amended) The semiconductor processing system of claim 9, further comprising:
a plurality of coolant passages formed in the monolithic lampholder near the reflector cavities.

11. The semiconductor processing system of claim 9, further comprising:
a reflective coating upon a surface of each reflector cavity.

12. (twice amended) The semiconductor processing system of claim 9, further comprising:
a plurality of lead passages formed in the monolithic lampholder, each lead passage in communication with one of the plurality of lamp receptacles and adapted to receive a lamp seal.

Sub
CS
B8
Cnd

13. (twice amended) The semiconductor processing system of claim 9, further comprising:
at least one lampholder having receptacles for outer leads of a lamp;
a ferrofluid; and
one or more magnets disposed about the lampholder and maintaining position of the ferrofluid near the receptacles;
such that when outer leads of a lamp are inserted into the lampholder receptacles, the ferrofluid surrounds the outer leads thereby suppressing arcing between the outer leads.

B9
Sub
Sub

14. (amended) The semiconductor processing system of claim 13, wherein:
the outer leads of the lamp are magnetic, such that the magnets maintain position of the lamp.

15. An apparatus for processing a substrate, comprising:
a process chamber having a support on which a substrate may be positioned during processing; and
a monolithic lamphead having a plurality of lamp receptacles and reflector cavities formed therein, each lamp receptacle adapted to support a lamp and the reflector cavities shaped such that the lamps direct radiant energy onto a substrate on the support.

16. The apparatus of claim 15, further comprising:
a plurality of coolant passages formed in the monolithic lamphead.

17. The apparatus of claim 15, further comprising:
a reflective coating upon a surface of each reflecting cavity.

B10
Sub
C7

18. (twice amended) The apparatus of claim 15, further comprising:
a plurality of lead passages formed into the monolithic lamphead, each lead passage in communication with one of the plurality of lamp receptacles and adapted to receive a lamp seal.

- SW
C7
Conc. 100
- BLW
Conc
19. (twice amended) The apparatus of claim 15, further comprising:
at least one lampholder having receptacles for outer leads of a lamp;
a ferrofluid; and
one or more magnets disposed about the lampholder and maintaining position of the
ferrofluid near the receptacles;
such that when outer leads of a lamp are inserted into the lampholder receptacles, the
ferrofluid surrounds the outer leads thereby suppressing arcing between the outer leads
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- BLW
SW
C8
20. (amended) The apparatus of claim 19, wherein:
the outer leads of the lamp are magnetic, such that the magnets maintain position of
the lamp.
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